REFERENCE TITLE: insurance; actuarial opinion; memorandum requirements

State of Arizona House of Representatives Forty-eighth Legislature First Regular Session 2007

HB 2189

Introduced by Representative Konopnicki

AN ACT

REPEALING TITLE 20, CHAPTER 3, ARTICLE 8, ARIZONA REVISED STATUTES; AMENDING TITLE 20, CHAPTER 3, ARIZONA REVISED STATUTES, BY ADDING A NEW ARTICLE 8; RELATING TO LIFE INSURANCE COMPANIES AND FRATERNAL BENEFIT SOCIETIES.

(TEXT OF BILL BEGINS ON NEXT PAGE)

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Be it enacted by the Legislature of the State of Arizona: Section 1. Repeal

Title 20, chapter 3, article 8, Arizona Revised Statutes, is repealed. Sec. 2. Title 20, chapter 3, Arizona Revised Statutes, is amended by adding a new article 8, to read:

ARTICLE 8. ACTUARIAL OPINION AND MEMORANDUM REQUIREMENTS

20-696. Scope of article

- A. THIS ARTICLE APPLIES TO ALL LIFE INSURANCE COMPANIES AND FRATERNAL BENEFIT SOCIETIES THAT ARE DOING BUSINESS IN THIS STATE OR THAT ARE AUTHORIZED TO REINSURE LIFE INSURANCE, ANNUITIES OR ACCIDENT AND HEALTH INSURANCE BUSINESS IN THIS STATE.
- B. THIS ARTICLE APPLIES TO ALL ANNUAL STATEMENTS THAT ARE FILED WITH THE DIRECTOR AFTER THE EFFECTIVE DATE OF THIS ARTICLE. ALL INSURERS SHALL FILE THE FOLLOWING WITH THE DIRECTOR EACH YEAR:
- 1. A STATEMENT OF OPINION ON THE ADEQUACY OF THE RESERVES AND RELATED ACTUARIAL ITEMS BASED ON AN ASSET ADEQUACY ANALYSIS THAT IS CONDUCTED PURSUANT TO SECTION 20-696.03.
- 2. A MEMORANDUM IN SUPPORT OF THE OPINION PURSUANT TO SECTION 20-696.04.
- C. IF A FOREIGN COMPANY IS REQUIRED TO SUBMIT A STATEMENT OF ACTUARIAL OPINION, THE DIRECTOR MAY ACCEPT THE STATEMENT OF ACTUARIAL OPINION THAT IS FILED BY THE COMPANY WITH THE INSURANCE SUPERVISORY REGULATOR OF ANOTHER STATE IF THE DIRECTOR DETERMINES THAT THE OPINION REASONABLY MEETS THE REQUIREMENTS APPLICABLE TO A COMPANY DOMICILED IN THIS STATE.
- D. THE DIRECTOR, BY ORDER, MAY ADOPT METHODS OF ACTUARIAL ANALYSIS AND ACTUARIAL ASSUMPTIONS THAT ARE NECESSARY FOR AN ACCEPTABLE OPINION AND MEMORANDUM CONSISTENT WITH THIS ARTICLE.

20-696.01. <u>Definitions</u>

IN THIS ARTICLE, UNLESS THE CONTEXT OTHERWISE REQUIRES:

- 1. "ACTUARIAL OPINION" MEANS THE OPINION OF AN APPOINTED ACTUARY REGARDING THE ADEQUACY OF THE RESERVES AND RELATED ACTUARIAL ITEMS THAT IS BASED ON AN ASSET ADEQUACY ANALYSIS CONDUCTED PURSUANT TO SECTION 20-696.03 AND THAT IS BASED ON PRESENTLY ACCEPTED ACTUARIAL STANDARDS OF PRACTICE.
- 2. "ACTUARIAL STANDARDS BOARD" MEANS THE BOARD THAT IS ESTABLISHED BY THE AMERICAN ACADEMY OF ACTUARIES TO DEVELOP AND PROMULGATE ACTUARIAL STANDARDS OF PRACTICE.
- 3. "ANNUAL STATEMENT" MEANS THE STATEMENT THAT AN INSURER ANNUALLY FILES WITH THE DIRECTOR PURSUANT TO SECTION 20-223.
- 4. "APPOINTED ACTUARY" MEANS AN INDIVIDUAL WHO IS APPOINTED OR RETAINED PURSUANT TO SECTION 20-696.02, SUBSECTION D TO PROVIDE THE ACTUARIAL OPINION AND SUPPORTING MEMORANDUM PRESCRIBED BY SECTION 20-510, SUBSECTION C.
- 5. "ASSET ADEQUACY ANALYSIS" MEANS AN ANALYSIS THAT MEETS THE STANDARDS AND OTHER REQUIREMENTS PRESCRIBED PURSUANT TO SECTION 20-696.02, SUBSECTION E.

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- 6. "COMPANY" MEANS AN INSURER, FRATERNAL BENEFIT SOCIETY OR REINSURER THAT IS SUBJECT TO THIS ARTICLE PURSUANT TO SECTION 20-696.
- 7. "QUALIFIED ACTUARY" MEANS ANY INDIVIDUAL WHO MEETS THE REQUIREMENTS PRESCRIBED IN SECTION 20-696.02, SUBSECTION B.

20-696.02. <u>General requirements: statement of actuarial opinion: qualified actuary: appointed actuary: analysis</u>

- A. THE FOLLOWING APPLY TO THE SUBMISSION OF STATEMENTS OF ACTUARIAL OPINION:
- 1. PURSUANT TO SECTION 20-696.03, A COMPANY SHALL INCLUDE WITH OR ATTACH TO PAGE ONE OF ITS ANNUAL STATEMENT THE STATEMENT OF ACTUARIAL OPINION THAT IS MADE BY AN APPOINTED ACTUARY AND THAT STATES AN OPINION RELATING TO RESERVES AND RELATED ACTUARIAL ITEMS HELD IN SUPPORT OF POLICIES AND CONTRACTS.
- 2. ON WRITTEN REQUEST BY THE COMPANY, THE DIRECTOR MAY GRANT AN EXTENSION OF THE DATE FOR SUBMISSION OF THE STATEMENT OF ACTUARIAL OPINION.
- B. A QUALIFIED ACTUARY IS AN INDIVIDUAL WHO MEETS THE FOLLOWING REQUIREMENTS:
 - 1. IS A MEMBER IN GOOD STANDING OF THE AMERICAN ACADEMY OF ACTUARIES.
- 2. IS QUALIFIED TO SIGN STATEMENTS OF ACTUARIAL OPINION FOR LIFE AND HEALTH INSURANCE COMPANY ANNUAL STATEMENTS PURSUANT TO THE AMERICAN ACADEMY OF ACTUARIES QUALIFICATION STANDARDS FOR ACTUARIES SIGNING THESE STATEMENTS.
- 3. IS FAMILIAR WITH THE VALUATION REQUIREMENTS THAT ARE APPLICABLE TO LIFE AND HEALTH INSURANCE COMPANIES.
- 4. HAS NOT BEEN FOUND BY THE DIRECTOR, AFTER APPROPRIATE NOTICE AND HEARING AND WITHOUT SUBSEQUENT REINSTATEMENT AS A QUALIFIED ACTUARY, TO HAVE DONE ANY OF THE FOLLOWING:
- (a) VIOLATED ANY PROVISION OF OR ANY OBLIGATION IMPOSED BY THIS TITLE OR OTHER LAW IN THE COURSE OF THE PERSON'S CONDUCT AS A QUALIFIED ACTUARY.
 - (b) BEEN CONVICTED OF A FRAUDULENT OR DISHONEST PRACTICE.
- (c) DEMONSTRATED INCOMPETENCE, LACK OF COOPERATION OR UNTRUSTWORTHINESS TO ACT AS A QUALIFIED ACTUARY.
- (d) PURSUANT TO THIS ARTICLE, SUBMITTED TO THE DIRECTOR DURING THE PAST FIVE YEARS AN ACTUARIAL OPINION OR MEMORANDUM THAT THE DIRECTOR REJECTED BECAUSE IT DID NOT MEET THE REQUIREMENTS PRESCRIBED BY THIS ARTICLE, INCLUDING STANDARDS PRESCRIBED BY THE ACTUARIAL STANDARDS BOARD.
- (e) RESIGNED OR BEEN REMOVED AS AN ACTUARY WITHIN THE PAST FIVE YEARS AS A RESULT OF ACTS OR OMISSIONS THAT ARE INDICATED IN ANY ADVERSE REPORT ON EXAMINATION OR AS A RESULT OF FAILURE TO ADHERE TO GENERALLY ACCEPTABLE ACTUARIAL STANDARDS.
- 5. HAS NOTIFIED THE DIRECTOR OF ANY ACTION TAKEN AGAINST THE ACTUARY BY THE DIRECTOR OR COMMISSIONER OF ANOTHER STATE FOR AN ACT THAT IS PROHIBITED UNDER PARAGRAPH 4 OF THIS SUBSECTION.

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- C. NOTWITHSTANDING SUBSECTION B, PARAGRAPH 4 OF THIS SECTION, FOR GOOD CAUSE SHOWN THE DIRECTOR MAY CLASSIFY AN INDIVIDUAL AS A QUALIFIED ACTUARY.
- D. AN APPOINTED ACTUARY IS A QUALIFIED ACTUARY WHO IS APPOINTED OR RETAINED TO PREPARE THE STATEMENT OF ACTUARIAL OPINION THAT IS REQUIRED BY THIS ARTICLE, EITHER DIRECTLY BY OR BY THE AUTHORITY OF THE BOARD OF DIRECTORS THROUGH AN EXECUTIVE OFFICER OF THE COMPANY OTHER THAN THE QUALIFIED ACTUARY. THE COMPANY SHALL GIVE THE DIRECTOR TIMELY WRITTEN NOTICE OF THE NAME AND TITLE OF THE APPOINTED ACTUARY, THE NAME OF THE FIRM IF THE ACTUARY IS A CONSULTING ACTUARY, AND THE MANNER OF APPOINTMENT OR RETENTION OF EACH PERSON WHO IS APPOINTED OR RETAINED BY THE COMPANY AS AN APPOINTED ACTUARY, AND SHALL STATE THAT THE PERSON MEETS THE REQUIREMENTS OF SUBSECTION B OF THIS SECTION. AFTER THE COMPANY FURNISHES THIS NOTICE, NO FURTHER NOTICE IS REQUIRED WITH RESPECT TO THIS PERSON. EXCEPT THAT THE COMPANY SHALL GIVE THE DIRECTOR TIMELY WRITTEN NOTICE IF THE ACTUARY CEASES TO BE APPOINTED OR RETAINED AS AN APPOINTED ACTUARY OR FAILS TO MEET THE REQUIREMENTS PRESCRIBED IN SUBSECTION B OF THIS SECTION. IF A PERSON WHO IS APPOINTED OR RETAINED AS AN APPOINTED ACTUARY REPLACES A PREVIOUSLY APPOINTED ACTUARY, THE NOTICE SHALL STATE THIS AND SHALL GIVE THE REASONS FOR THE REPLACEMENT.
 - E. THE ASSET ADEQUACY ANALYSIS REQUIRED BY THIS ARTICLE SHALL:
- 1. CONFORM TO THE ACTUARIAL STANDARDS OF PRACTICE AS PROMULGATED FROM TIME TO TIME BY THE ACTUARIAL STANDARDS BOARD AND TO ANY ADDITIONAL STANDARDS PURSUANT TO THIS ARTICLE THAT FORM THE BASIS OF THE STATEMENT OF ACTUARIAL OPINION PURSUANT TO THIS ARTICLE.
- 2. BE BASED ON METHODS OF ANALYSIS AS ARE DEEMED APPROPRIATE FOR THESE PURPOSES BY THE ACTUARIAL STANDARDS BOARD.
 - F. LIABILITIES SHALL BE COVERED IN THE ACTUARIAL OPINION AS FOLLOWS:
- 1. PURSUANT TO SECTION 20-510, SUBSECTION C, THE STATEMENT OF ACTUARIAL OPINION APPLIES TO ALL IN FORCE BUSINESS ON THE STATEMENT DATE, WHETHER DIRECTLY ISSUED OR ASSUMED AND REGARDLESS OF WHEN OR WHERE ISSUED.
- 2. IF THE APPOINTED ACTUARY DETERMINES AS THE RESULT OF AN ASSET ADEQUACY ANALYSIS THAT A RESERVE SHOULD BE HELD IN ADDITION TO THE AGGREGATE RESERVE HELD BY THE COMPANY AND CALCULATED PURSUANT TO THE METHODS PRESCRIBED IN SECTION 20-510, THE COMPANY SHALL ESTABLISH THE ADDITIONAL RESERVE.
- 3. ADDITIONAL RESERVES THAT ARE ESTABLISHED UNDER PARAGRAPH 2 OF THIS SUBSECTION AND THAT ARE DEEMED UNNECESSARY IN SUBSEQUENT YEARS MAY BE RELEASED. ANY AMOUNTS RELEASED SHALL BE DISCLOSED IN THE ACTUARIAL OPINION FOR THE APPLICABLE YEAR. THE RELEASE OF THESE RESERVES IS NOT DEEMED AN ADOPTION OF A LOWER STANDARD OF VALUATION.
 - 20-696.03. <u>Statement of actuarial opinion based on an asset adequacy analysis</u>
- A. THE STATEMENT OF ACTUARIAL OPINION SUBMITTED PURSUANT TO THIS SECTION CONSISTS OF:
- 1. A PARAGRAPH IDENTIFYING THE APPOINTED ACTUARY AND THE ACTUARY'S QUALIFICATIONS PURSUANT TO SECTION 20-696.02, SUBSECTION B.

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- 2. A SCOPE PARAGRAPH THAT IDENTIFIES THE SUBJECTS ON WHICH AN OPINION IS TO BE EXPRESSED, THAT DESCRIBES THE SCOPE OF THE APPOINTED ACTUARY'S WORK, INCLUDING A TABLE OF RESERVES AND RELATED ACTUARIAL ITEMS THAT HAVE BEEN ANALYZED FOR ASSET ADEQUACY AND THE METHOD OF ANALYSIS, AND THAT IDENTIFIES THE RESERVES AND RELATED ACTUARIAL ITEMS COVERED BY THE OPINION THAT HAVE NOT BEEN ANALYZED FOR ASSET ADEQUACY.
- 3. A RELIANCE PARAGRAPH THAT DESCRIBES THOSE AREAS, IF ANY, IN WHICH THE APPOINTED ACTUARY WHO ISSUES THE OPINION PURSUANT TO THIS SECTION HAS DEFERRED TO OTHER EXPERTS TO DEVELOP DATA, PROCEDURES OR ASSUMPTIONS AND THAT IS SUPPORTED BY A STATEMENT OF EACH EXPERT IN THE FORM PRESCRIBED BY THE DIRECTOR.
- 4. AN OPINION PARAGRAPH EXPRESSING THE APPOINTED ACTUARY'S OPINION WITH RESPECT TO THE ADEQUACY OF THE SUPPORTING ASSETS TO MATURE THE LIABILITIES.
- 5. ONE OR MORE ADDITIONAL PARAGRAPHS AS REQUIRED IN INDIVIDUAL COMPANY CASES AS FOLLOWS:
- (a) THE APPOINTED ACTUARY CONSIDERS IT NECESSARY TO STATE A QUALIFICATION OF THE APPOINTED ACTUARY'S OPINION.
- (b) THE APPOINTED ACTUARY MUST DISCLOSE AN INCONSISTENCY IN THE METHOD OF ANALYSIS OR BASIS OF ASSET ALLOCATION USED AT THE PRIOR OPINION DATE WITH THAT USED FOR THIS OPINION.
- (c) THE APPOINTED ACTUARY MUST DISCLOSE WHETHER ADDITIONAL RESERVES AS OF THE PRIOR OPINION DATE ARE RELEASED AS OF THIS OPINION DATE AND THE EXTENT OF THE RELEASE.
- (d) THE APPOINTED ACTUARY CHOOSES TO ADD A PARAGRAPH BRIEFLY DESCRIBING THE ASSUMPTIONS THAT FORM THE BASIS FOR THE ACTUARIAL OPINION.
- B. IF THE APPOINTED ACTUARY IS UNABLE TO FORM AN OPINION, THE APPOINTED ACTUARY SHALL REFUSE TO ISSUE A STATEMENT OF ACTUARIAL OPINION. IF THE APPOINTED ACTUARY'S OPINION IS ADVERSE OR QUALIFIED, THE APPOINTED ACTUARY SHALL ISSUE AN ADVERSE OR QUALIFIED ACTUARIAL OPINION EXPLICITLY STATING THE REASONS FOR THE OPINION.
- C. IF THE APPOINTED ACTUARY RELIES ON THE CERTIFICATION OF OTHERS ON MATTERS CONCERNING THE ACCURACY OR COMPLETENESS OF ANY DATA UNDERLYING THE ACTUARIAL OPINION OR THE APPROPRIATENESS OF ANY OTHER INFORMATION USED BY THE APPOINTED ACTUARY IN FORMING THE ACTUARIAL OPINION, THE ACTUARIAL OPINION SHOULD INDICATE THE PERSONS THE ACTUARY IS RELYING ON AND A PRECISE IDENTIFICATION OF THE ITEMS THAT ARE SUBJECT TO RELIANCE. IN ADDITION, THE PERSONS ON WHOM THE APPOINTED ACTUARY RELIES SHALL PROVIDE A CERTIFICATION THAT PRECISELY IDENTIFIES THE ITEMS ON WHICH THE PERSON IS PROVIDING INFORMATION AND A STATEMENT AS TO THE ACCURACY, COMPLETENESS OR REASONABLENESS, AS APPLICABLE, OF THE ITEMS. THIS CERTIFICATION SHALL INCLUDE THE SIGNATURE, TITLE, COMPANY, ADDRESS AND TELEPHONE NUMBER OF THE PERSON WHO IS RENDERING THE CERTIFICATION AND THE DATE ON WHICH IT IS SIGNED.

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20-696.04. <u>Description of actuarial memorandum including an</u> <u>asset adequacy analysis and regulatory asset</u> adequacy issues summary

- A. PURSUANT TO SECTION 20-510, SUBSECTION C, THE APPOINTED ACTUARY SHALL PREPARE A MEMORANDUM TO THE COMPANY DESCRIBING THE ANALYSIS IN SUPPORT OF THE APPOINTED ACTUARY'S OPINION REGARDING THE RESERVES.
- B. THE DIRECTOR MAY EXAMINE THE MEMORANDUM PURSUANT TO THIS SECTION AND SHALL RETURN THE MEMORANDUM TO THE COMPANY AFTER THE EXAMINATION. THE MEMORANDUM IS NOT A RECORD OF THE DEPARTMENT AND IS NOT SUBJECT TO AUTOMATIC FILING WITH THE DIRECTOR.
- C. THE APPOINTED ACTUARY MAY RELY ON AND INCLUDE AS A PART OF THE MEMORANDUM OTHER MEMORANDA THAT ARE PREPARED AND SIGNED BY OTHER ACTUARIES WHO ARE QUALIFIED PURSUANT TO SECTION 20-696.02, SUBSECTION B. THE MEMORANDUM SHALL STATE THAT THE APPOINTED ACTUARY RELIED ON OTHER QUALIFIED ACTUARIES TO PREPARE THE MEMORANDUM.
- D. IF THE DIRECTOR REQUESTS A MEMORANDUM AND NO SUCH MEMORANDUM EXISTS, OR IF THE DIRECTOR FINDS THAT THE ANALYSIS DESCRIBED IN THE MEMORANDUM FAILS TO MEET THE STANDARDS OF THE ACTUARIAL STANDARDS BOARD OR THE STANDARDS AND REQUIREMENTS OF THIS ARTICLE, THE DIRECTOR MAY DESIGNATE A QUALIFIED ACTUARY TO REVIEW THE OPINION AND PREPARE A SUPPORTING MEMORANDUM AS IS REQUIRED FOR REVIEW. THE COMPANY SHALL PAY ANY REASONABLE AND NECESSARY EXPENSES OF THE INDEPENDENT REVIEW. THE DIRECTOR SHALL DIRECT AND CONTROL THE REVIEW.
- E. THE REVIEWING ACTUARY WHO IS DESIGNATED UNDER SUBSECTION D OF THIS SECTION HAS THE SAME STATUS AS AN EXAMINER FOR THE PURPOSES OF OBTAINING DATA FROM THE COMPANY. THE DIRECTOR SHALL RETAIN THE WORK PAPERS AND DOCUMENTATION OF THE REVIEWING ACTUARY. THE DIRECTOR SHALL KEEP THE WORK PAPERS AND DOCUMENTATION CONFIDENTIAL. THE REVIEWING ACTUARY SHALL NOT BE AN EMPLOYEE OF A CONSULTING FIRM THAT IS INVOLVED WITH THE PREPARATION OF ANY PRIOR ACTUARIAL MEMORANDUM OR OPINION FOR THE INSURER PURSUANT TO THIS ARTICLE DURING THE CURRENT YEAR OR THE PRECEDING THREE YEARS.
- F. THE APPOINTED ACTUARY SHALL PREPARE A REGULATORY ASSET ADEQUACY ISSUES SUMMARY PURSUANT TO SUBSECTION H OF THIS SECTION. THE REGULATORY ASSET ADEQUACY ISSUES SUMMARY SHALL BE SUBMITTED NO LATER THAN MARCH 15 OF THE YEAR FOLLOWING THE YEAR FOR WHICH A STATEMENT OF ACTUARIAL OPINION BASED ON ASSET ADEQUACY IS REQUIRED. THE DIRECTOR SHALL KEEP THE REGULATORY ASSET ADEQUACY ISSUES SUMMARY CONFIDENTIAL TO THE SAME EXTENT AND UNDER THE SAME CONDITIONS AS THE ACTUARIAL MEMORANDUM.
- G. IF AN ACTUARIAL OPINION IS PROVIDED THE MEMORANDUM SHALL DEMONSTRATE THAT THE ANALYSIS WAS CONDUCTED PURSUANT TO THE STANDARDS FOR ASSET ADEQUACY PRESCRIBED PURSUANT TO SECTION 20-696.03 AND ANY ADDITIONAL STANDARDS PRESCRIBED PURSUANT TO THIS ARTICLE. THE MEMORANDUM SHALL SPECIFY:
 - 1. FOR RESERVES:

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(a) PRODUCT DESCRIPTIONS, INCLUDING MARKET DESCRIPTION, UNDERWRITING
AND OTHER ASPECTS OF A RISK PROFILE AND THE SPECIFIC RISKS THE APPOINTED
ACTUARY DEEMS SIGNIFICANT.
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- (b) SOURCE OF LIABILITY IN FORCE.
- (c) RESERVE METHOD AND BASIS.
- (d) INVESTMENT RESERVES.
- (e) REINSURANCE ARRANGEMENTS.
- (f) IDENTIFICATION OF ANY EXPLICIT OR IMPLIED GUARANTEES MADE BY THE GENERAL ACCOUNT IN SUPPORT OF BENEFITS PROVIDED THROUGH A SEPARATE ACCOUNT OR UNDER A SEPARATE ACCOUNT POLICY OR CONTRACT AND THE METHODS USED BY THE APPOINTED ACTUARY TO PROVIDE FOR THE GUARANTEES IN THE ASSET ADEQUACY ANALYSIS.
- (q) DOCUMENTATION OF ASSUMPTIONS, INCLUDING DOCUMENTATION TO ALLOW AN ACTUARY REVIEWING THE ACTUARIAL MEMORANDUM TO FORM A CONCLUSION ABOUT THE REASONABLENESS OF THE ASSUMPTIONS, TO TEST RESERVES FOR THE FOLLOWING:
 - (i) BASE LAPSE RATES AND EXCESS LAPSE RATES.
 - (ii) INTEREST CREDITING RATE STRATEGY.
- (iii) MORTALITY.
- (iv) POLICYHOLDER DIVIDEND STRATEGY.
 - (v) COMPETITOR OR MARKET INTEREST RATE.
 - (vi) ANNUITIZATION RATES.
 - (vii) COMMISSIONS AND EXPENSES.
- 23 (viii) MORBIDITY.
- 24 2. FOR ASSETS:
- (a) PORTFOLIO DESCRIPTIONS, INCLUDING A RISK PROFILE THAT DISCLOSES 26 THE QUALITY, DISTRIBUTION AND TYPES OF ASSETS.
 - (b) INVESTMENT AND DISINVESTMENT ASSUMPTIONS.
 - (c) SOURCE OF ASSET DATA.
 - (d) ASSET VALUATION BASES.
 - (e) DOCUMENTATION OF ASSUMPTIONS, INCLUDING DOCUMENTATION TO ALLOW AN ACTUARY REVIEWING THE ACTUARIAL MEMORANDUM TO FORM A CONCLUSION ABOUT THE REASONABLENESS OF THE ASSUMPTIONS, MADE FOR:
 - (i) DEFAULT COSTS.
 - (ii) BOND CALL FUNCTION.
 - (iii) MORTGAGE PREPAYMENT FUNCTION.
- 36 (iv) DETERMINING MARKET VALUE FOR ASSETS SOLD DUE TO DISINVESTMENT 37 STRATEGY.
- 38 (v) DETERMINING YIELD ON ASSETS ACQUIRED THROUGH THE INVESTMENT 39 STRATEGY.
 - 3. FOR THE ANALYSIS BASIS:
 - (a) METHODOLOGY.
- 42 (b) RATIONALE FOR INCLUSION OR EXCLUSION OF DIFFERENT BLOCKS OF 43 BUSINESS AND HOW PERTINENT RISKS WERE ANALYZED.
- 44 (c) RATIONALE FOR DEGREE OF RIGOR IN ANALYZING DIFFERENT BLOCKS OF 45 BUSINESS.

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- (d) CRITERIA FOR DETERMINING ASSET ADEQUACY.
- (e) IMPACT OF FEDERAL INCOME TAXES AND THE METHOD OF TREATING REINSURANCE IN THE ASSET ADEQUACY ANALYSIS.
- 4. A SUMMARY OF MATERIAL CHANGES IN METHODS, PROCEDURES OR ASSUMPTIONS FROM A PRIOR YEAR'S ASSET ADEQUACY ANALYSIS.
 - 5. A SUMMARY OF RESULTS.
 - 6. CONCLUSIONS.
 - H. THE REGULATORY ASSET ADEQUACY ISSUES SUMMARY SHALL INCLUDE:
- 1. DESCRIPTIONS OF THE SCENARIOS TESTED, INCLUDING WHETHER THOSE SCENARIOS ARE STOCHASTIC OR DETERMINISTIC, AND THE SENSITIVITY TESTING DONE RELATIVE TO THOSE SCENARIOS. IF NEGATIVE ENDING SURPLUS RESULTS UNDER CERTAIN TESTS IN THE AGGREGATE, THE APPOINTED ACTUARY SHALL DESCRIBE THOSE TESTS AND THE AMOUNT OF ADDITIONAL RESERVE AS OF THE VALUATION DATE THAT, IF HELD, WOULD ELIMINATE THE NEGATIVE AGGREGATE SURPLUS VALUES. ENDING SURPLUS VALUES SHALL BE DETERMINED EITHER BY EXTENDING THE PROJECTION PERIOD UNTIL THE IN FORCE AND ASSOCIATED ASSETS AND LIABILITIES AT THE END OF THE PROJECTION PERIOD ARE IMMATERIAL OR BY ADJUSTING THE SURPLUS AMOUNT AT THE END OF THE PROJECTION PERIOD BY AN AMOUNT THAT APPROPRIATELY ESTIMATES THE VALUE THAT CAN REASONABLY BE EXPECTED TO ARISE FROM THE ASSETS AND LIABILITIES REMAINING IN FORCE.
- 2. THE EXTENT TO WHICH THE APPOINTED ACTUARY USES ASSUMPTIONS IN THE ASSET ADEQUACY ANALYSIS THAT ARE MATERIALLY DIFFERENT THAN THE ASSUMPTIONS USED IN THE PREVIOUS ASSET ADEQUACY ANALYSIS.
- 3. THE AMOUNT OF RESERVES AND THE IDENTITY OF THE PRODUCT LINES THAT HAD BEEN SUBJECTED TO ASSET ADEQUACY ANALYSIS IN THE PRIOR OPINION BUT THAT WERE NOT SUBJECT TO ANALYSIS FOR THE CURRENT OPINION.
- 4. COMMENTS ON ANY INTERIM RESULTS THAT MAY BE OF SIGNIFICANT CONCERN TO THE APPOINTED ACTUARY.
- 5. THE METHODS USED BY THE APPOINTED ACTUARY TO RECOGNIZE THE IMPACT OF REINSURANCE ON THE COMPANY'S CASH FLOWS, INCLUDING BOTH ASSETS AND LIABILITIES, UNDER EACH OF THE SCENARIOS TESTED.
- 6. THE EXTENT TO WHICH THE APPOINTED ACTUARY IS SATISFIED THAT ALL OPTIONS, WHETHER EXPLICIT OR EMBEDDED, IN ANY ASSET OR LIABILITY AND EQUITY-LIKE FEATURES IN ANY INVESTMENTS ARE APPROPRIATELY CONSIDERED IN THE ASSET ADEQUACY ANALYSIS.
- 7. THE NAME OF THE COMPANY FOR WHICH THE REGULATORY ASSET ADEQUACY ISSUES SUMMARY IS BEING SUPPLIED.
- 8. THE SIGNATURE OF THE APPOINTED ACTUARY AND THE DATE OF THE SIGNATURE.
 - I. THE MEMORANDUM SHALL INCLUDE THE FOLLOWING STATEMENT:
 "ACTUARIAL METHODS, CONSIDERATIONS AND ANALYSES USED IN THE
 PREPARATION OF THIS MEMORANDUM CONFORM TO THE APPROPRIATE
 ACTUARIAL STANDARDS OF PRACTICE AS PROMULGATED BY THE ACTUARIAL
 STANDARDS BOARD THAT FORM THE BASIS FOR THIS MEMORANDUM."

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- J. AN APPROPRIATE ALLOCATION OF ASSETS IN THE AMOUNT OF THE INTEREST MAINTENANCE RESERVE WHETHER POSITIVE OR NEGATIVE, SHALL BE USED IN ANY ASSET ADEQUACY ANALYSIS. ANALYSIS OF RISKS REGARDING ASSET DEFAULT MAY INCLUDE AN APPROPRIATE ALLOCATION OF ASSETS SUPPORTING THE ASSET VALUATION RESERVE. THESE ASSET VALUATION RESERVE ASSETS MAY NOT BE APPLIED FOR ANY OTHER RISKS WITH RESPECT TO RESERVE ADEQUACY. ANALYSIS OF THESE AND OTHER RISKS MAY INCLUDE ASSETS SUPPORTING OTHER MANDATORY OR VOLUNTARY RESERVES AVAILABLE TO THE EXTENT NOT USED FOR RISK ANALYSIS AND RESERVE SUPPORT.
- K. THE AMOUNT OF THE ASSETS USED FOR THE ASSET VALUATION RESERVE SHALL BE DISCLOSED IN THE TABLE OF RESERVES AND LIABILITIES OF THE OPINION AND IN THE MEMORANDUM. THE METHOD USED FOR SELECTING PARTICULAR ASSETS OR ALLOCATED PORTIONS OF ASSETS SHALL BE DISCLOSED IN THE MEMORANDUM.
- L. THE APPOINTED ACTUARY SHALL RETAIN ON FILE, FOR AT LEAST SEVEN YEARS, SUFFICIENT DOCUMENTATION TO DETERMINE THE PROCEDURES FOLLOWED, THE ANALYSES PERFORMED, THE BASES FOR ASSUMPTIONS AND THE RESULTS OBTAINED.

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